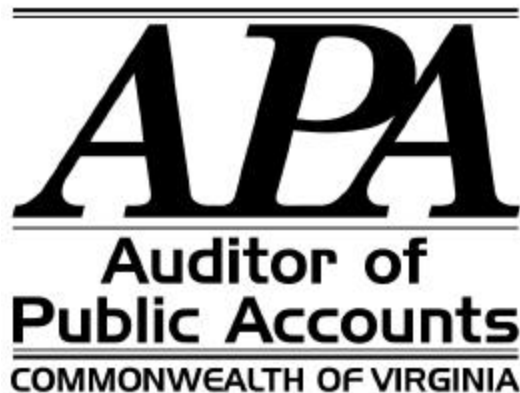


**INTEGRATED HUMAN RESOURCES
INFORMATION SYSTEM (IHRIS)**

RICHMOND, VIRGINIA

SPECIAL REPORT

JANUARY 20, 1998



January 20, 1998

The Honorable James S. Gilmore, III
Governor of Virginia

The Honorable V. Earl Dickinson
Co-Chairman, House Appropriations Committee

The Honorable John H. Chichester
Co-Chairman, Senate Finance Committee

The Honorable Vincent F. Callahan, Jr.
Co-Chairman, House Appropriations Committee

The Honorable Stanley C. Walker
Co-Chairman, Senate Finance Committee

Gentlemen:

We have reviewed the status and progress of the Integrated Human Resources Information System as required by the 1997 Appropriations Act. Our involvement in the project has been ongoing for the past year.

Several issues that need close attention and timely resolution include:

- The Department of Information Technology, Department of General Services and Virginia Tech must cooperate with the IHRIS project team, and each other, to develop an established procedure that agencies can follow to have their connectivity with IHRIS resolved efficiently.
- The IHRIS project team must continue to identify and evaluate solutions to compensate for the lack of PeopleSoft password security.
- The IHRIS project team must maintain communications with agencies to identify hardware and software needs early to facilitate budgeting, procurement, and installation before deployment.
- The IHRIS project team must be able to recruit and retain qualified technical staff if they expect to complete the project as scheduled.

In addition to issues identified in this report, the IHRIS project team, in collaboration with The Hunter Group, prepares periodic reports that detail the project status. The reports describe outstanding development items, results of performance tests, and the detailed master plan with estimated completion dates for individual tasks.

CONCLUSION

The IHRIS project is proceeding as scheduled and within budget. However, the project is at a critical stage where unforeseen problems could delay the deployment to initial sites and result in project overruns. Strong project management and agency cooperation continues to be imperative.

EXIT CONFERENCE

We discussed this report with officials at the Department of Personnel and Training and the Department of Accounts on January 13, 1998.

AUDITOR OF PUBLIC ACCOUNTS

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Background

The Commonwealth of Virginia has more than 100,000 permanent and temporary employees in over 200 state agencies. Three different computer systems support the Commonwealth personnel and payrolls. These systems are the Personnel Management and Information System, Benefits Eligibility System, and Commonwealth Integrated Payroll and Personnel System. To consolidate systems and use technology, the Commonwealth authorized the implementation of an integrated payroll and human resource system.

Funding for the system comes from a Treasury loan from the General Account's Non-general Fund cash balances expected to total \$13.2 million. Agencies will repay the loans over 10 years from a mixture of General and Non-general Funds.

The Department of Personnel and Training and the Department of Accounts are the lead agencies responsible for developing and implementing IHRIS. Personnel and Training has the project management responsibility while Accounts has the disbursement and accounting responsibility. In addition, the Virginia Community College System, the Departments of Transportation, Health, and Account's Payroll Service Bureau will participate as the initial sites for implementing IHRIS, scheduled for third quarter, 1998.

The original Request for Proposal (RFP) included as one contract: software development, implementation, and training services. The Commonwealth received one bid for this RFP which far exceeded the available funds and anticipated cost for this project. Therefore, the lead agencies re-wrote the RFP, separating the software procurement from the desired technical services. Further, the lead agencies decided to take on some of the roles originally intended for the vendor and decrease some of the required services. These changes have not negatively impacted the final product to date. In fact, they may have increased the Commonwealth's ability to manage the system internally.

The IHRIS Steering Committee selected PeopleSoft as the contractor to provide the software, installation, and training services, excluding end-user training. The Hunter Group received the contract for facilitating the changes to the PeopleSoft software and to provide technical expertise and knowledge to the project. The Hunter Group also provides the lead agencies with training and technical support.

Review Activities

To review the progress of this project, we held and attended meetings with project management, consultants, and agency personnel. We attended the Interactive Design and Prototyping sessions. We have also reviewed project expenses and compared them for reasonableness with the status of the project and budget.

Spending

The table below shows the IHRIS project budget compared to project costs.

<u>Category</u>	<u>Budget</u>	<u>Expenses as of November 1997</u>	<u>Budget Balance</u>
Software (PeopleSoft)	\$ 2,540,840	\$2,540,840	\$ -
Platform	3,112,760	514,941	2,597,819
Consulting	3,850,000	1,903,107	1,946,893
Training	780,000	196,424	583,576
Maintenance	<u>2,772,436</u>	<u>684,438</u>	<u>2,087,998</u>
Total	<u>\$13,056,036</u>	<u>\$5,839,750</u>	<u>\$7,216,286</u>

Based on the progress of the project and activities undertaken, the expenses appear reasonable and within the anticipated budget.

Implementation

Interactive Design and Prototyping (IDP) sessions facilitated by The Hunter Group served as the mechanism to determine what changes were necessary for the PeopleSoft application to operate in the Commonwealth. The lead agencies received the PeopleSoft application and have developed a working prototype with most of the IDP modifications included. PeopleSoft delivered a new release of the application in January 1998 and the lead agencies are working to implement the new release into the prototype.

After completing the upgrade, the lead agencies will issue IHRIS to the initial sites in third quarter, 1998. However, deployment will be driven by the initial sites' ability to meet specific readiness criteria. It is accurate to describe IHRIS deployment as being event driven rather than date driven. The initial sites will begin using the IHRIS human resource module and then the payroll module. During the initial phase, these sites will run IHRIS in parallel with the state's existing systems.

Other state agencies will be deployed in stages. Since full deployment will not conclude until after January 1, 2000, the existing systems must be Year 2000 compliant. The Department of Accounts is working to bring CIPPS Year 2000 compliant and have recently received vendor provided batch software to complete the conversion. Personnel and Training has made both of its systems Year 2000 compliant.

Issues

Develop Cooperative Effort to Provide for Connectivity

Three networks exist that connect agencies throughout the Commonwealth: the Campus Network maintained by the Department of General Services, Network Virginia established by Virginia Tech, and the CTN managed by the Department of Information Technology (DIT). DIT is the service bureau that is housing the IHRIS servers and agencies may use any of the three networks to communicate with this server.

Personnel and Training, and Accounts, as well as the initial sites, have had problems resolving connectivity issues when the problem appeared to involve more than one of the agencies managing a network. As the Commonwealth distributes IHRIS, all agencies will need a procedure to resolve their connectivity issues, no matter which networks the agency uses. It is imperative DIT recognizes each of these networks as viable methods of connectivity. The managing agencies must cooperate to identify their responsibilities and provide prompt solutions. Failure to address and support connectivity could significantly hinder the deployment of IHRIS.

Ensure Secure Environment

PeopleSoft applications have insufficient password controls. For example, users have unlimited password attempts, are never forced to change their password, and there is no logging of failed password attempts. In addition, the user may choose a password that is one character in length, such as a carriage return. Given the sensitivity and financial impact of the information to be maintained on IHRIS, the lead agencies need to continue to focus on identifying and evaluating compensating solutions available to address security, including third party software solutions, and implement them prior to initial agency deployment.

Communicate Hardware/Software Requirements

Personnel and Training, and Accounts surveyed the initial sites and developed an IHRIS Implementation Guide. The Guide includes information about the steps necessary to implement IHRIS as well as the minimum hardware/software standards. As the lead agencies plan for full deployment, they must promptly communicate hardware/software requirements to the remaining agencies. This will allow the remaining IHRIS agencies to budget for and address their hardware/software needs sufficiently in advance to meet their deployment dates.

Maintain Qualified Technical Staff

The successful completion of any project relies on the agency's ability to hire and retain qualified technical people. On their third recruiting attempt, the lead agencies did hire a qualified Oracle database administrator for the IHRIS project. This individual stayed nine months, but recently resigned after receiving a better job offer.

Each resignation and hiring impacts the time for IHRIS completion. To reduce this impact, the lead agencies need to fill positions quickly and also be able to offer a qualified individual sufficient incentive to stay with the project. Nationally, as well as in the Richmond area, the ability to hire and retain technical staff is difficult. Yet, without qualified technical people, the Commonwealth will not be able to complete this and other critical system projects.